SOLAR ON
WHEELS

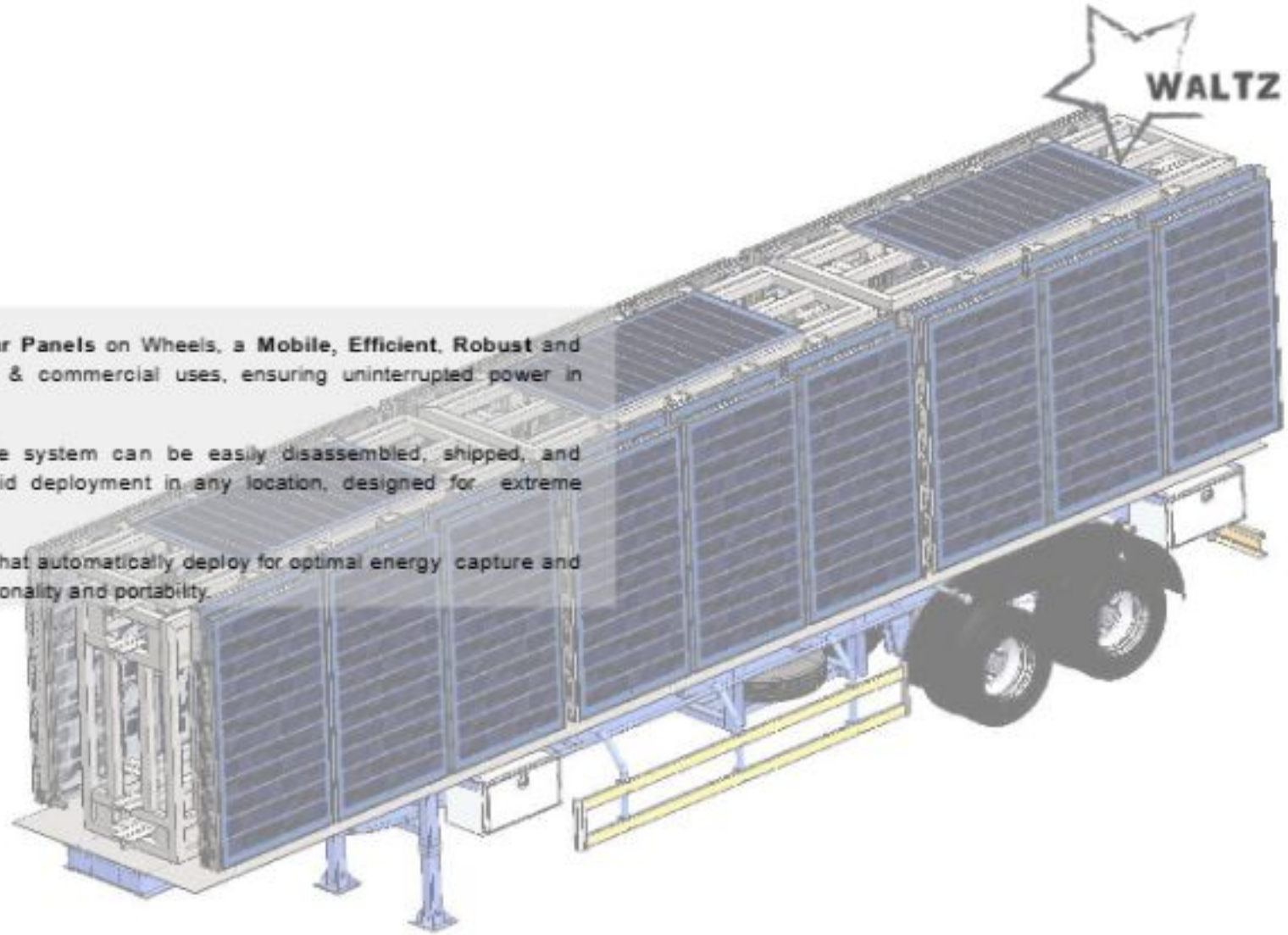
WALTZ

PRODUCT OVERVIEW

The Solar on Wheels Product delivers **Solar Panels** on Wheels, a **Mobile, Efficient, Robust** and **sustainable** energy solution for industrial & commercial uses, ensuring uninterrupted power in **Remote & off-grid environments**.

Engineered as a knockdown structure, the system can be easily disassembled, shipped, and reassembled with precision, facilitating rapid deployment in any location, designed for extreme temperature conditions.

The design integrates foldable solar panels that automatically deploy for optimal energy capture and retract when not in use, maximizing both functionality and portability.



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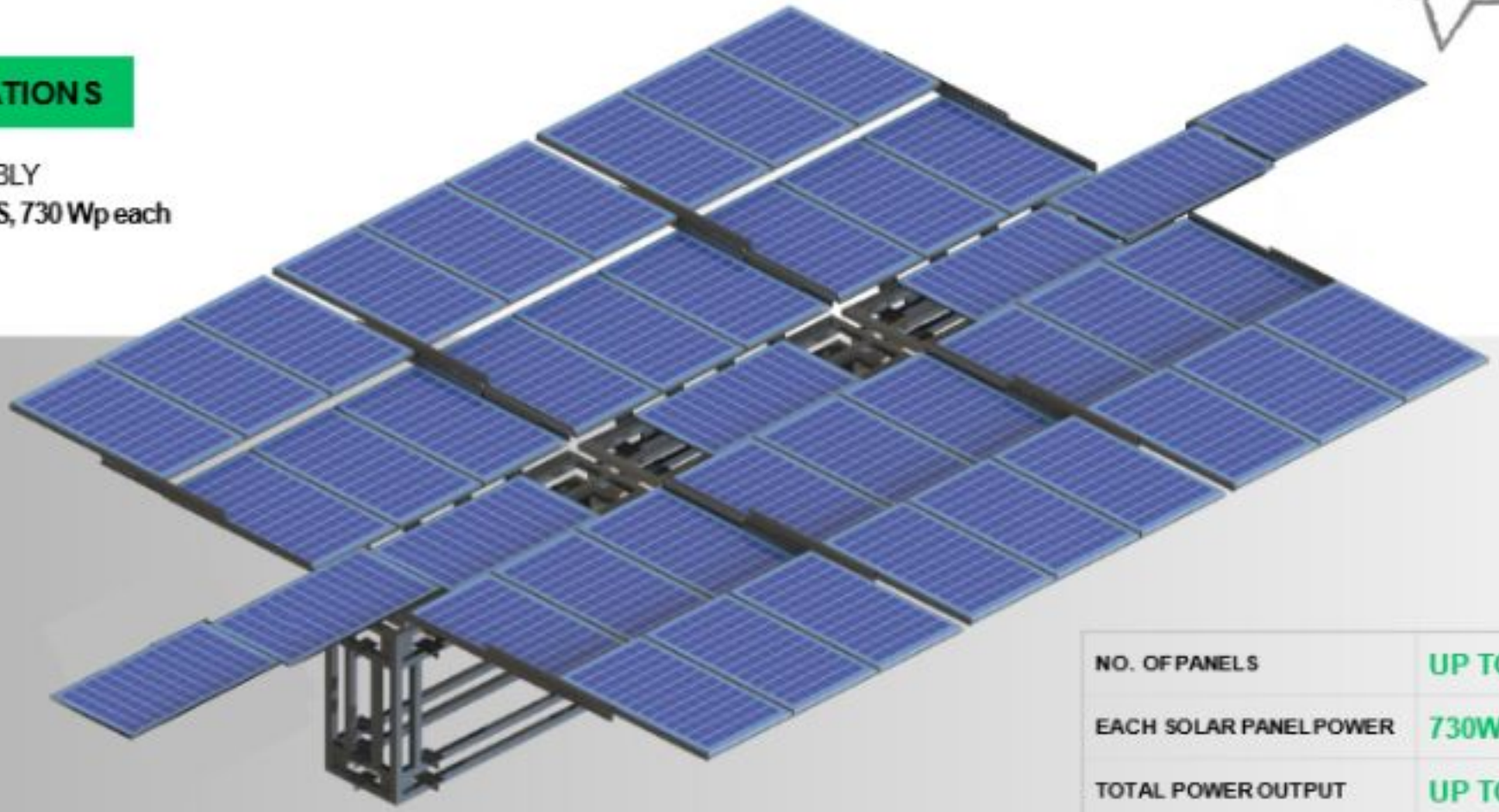
SPECIFICATIONS

PANELS ASSEMBLY
WITH 43 PANELS, 730 Wp each



NO. OF PANELS	UP TO 43
EACH SOLAR PANEL POWER	730Wp +
TOTAL POWER OUTPUT	UP TO 32 kW

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MECHANISM

1

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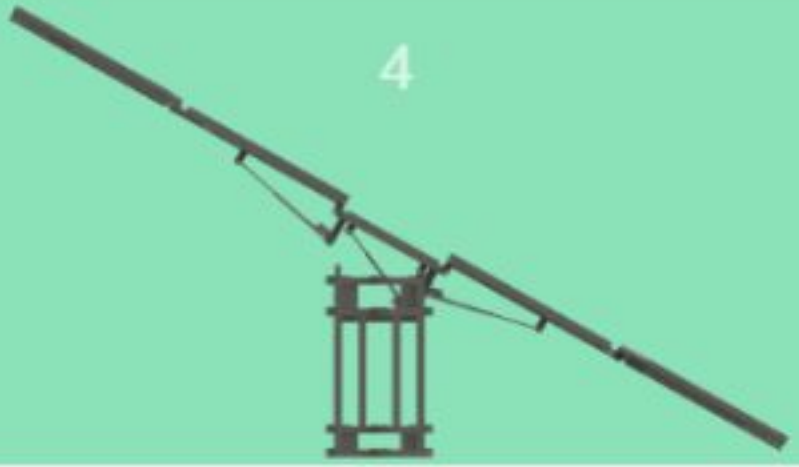

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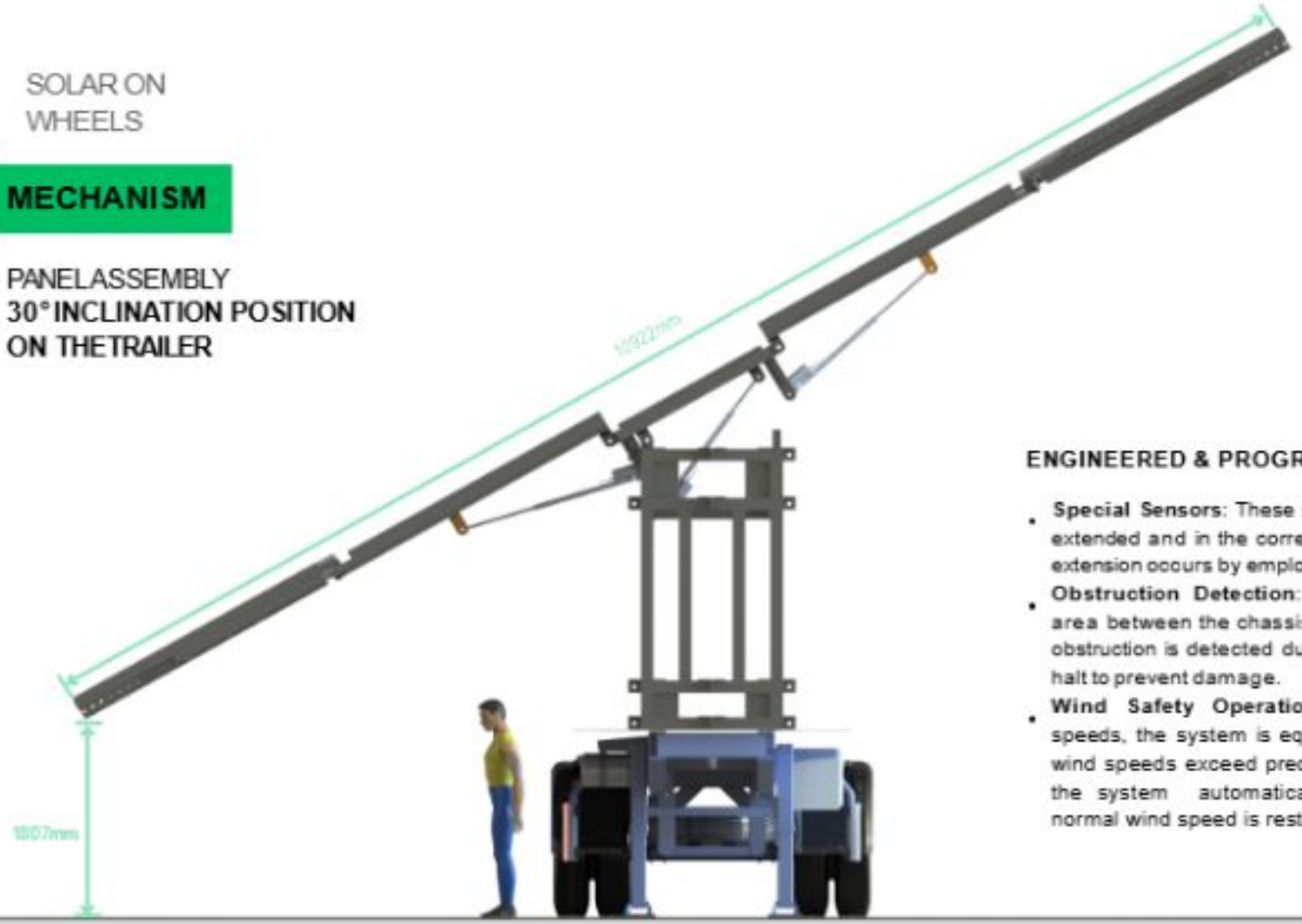
MECHANISM

PANELASSEMBLY
30° INCLINATION POSITION
ON THETRAILER



ENGINEERED & PROGRAMMED SYSTEM

- **Special Sensors**: These sensors confirm that the panels are fully extended and in the correct tilt position. They also ensure no over-extension occurs by employing limit switches.
- **Obstruction Detection**: Proximity sensors actively monitor the area between the chassis and the closing panel assembly. If any obstruction is detected during the closing process, the system will halt to prevent damage.
- **Wind Safety Operations**: To safeguard against high wind speeds, the system is equipped with wind safety mechanisms. If wind speeds exceed predefined limits, an alarm is triggered, and the system automatically retracts and then re-deploy when normal wind speed is restored.

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FEATURES

MODULAR & SCALABLE SOLUTION

The system can scale through modular additions of 13–15 panel sets, making it adaptable to varying energy demands—from small-scale remote projects to large industrial applications.

SUSTAINABLE UNINTERRUPTED POWER

Delivers continuous renewable energy to remote and off-grid locations, ensuring a reliable power supply for critical operations such as telecommunications, emergency services, and industrial processes.

REMOTE AND AUTOMATED OPERATION

The system is automated and can be remotely monitored and controlled, ensuring efficient, hands-off operation over extended periods. This minimizes the need for on-site intervention and enables centralized management.

COMPACT AND EFFICIENT DEPLOYMENT

Designed to be compact for transportation, the system is engineered for quick deployment and retraction, making it ideal for emergency services and remote locations.

DESIGNED FOR EXTREME ENVIRONMENTS

Built to endure harsh conditions, the system is resistant to high wind speeds and extreme weather, ensuring stable and continuous operation even in the most demanding environments.

ENERGY MOBILITY

A highly portable, easy-to-deploy energy solution that can be efficiently transported and installed in remote areas, improving energy availability where the grid is unavailable, and diesel generators are costly and impractical.

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MECHANISM

PANEL ASSEMBLY
CLOSED POSITION

ENGINEERED & PROGRAMMED SYSTEM

- The Programmed System ensures that all actuators are fully retracted before initiating any movement.

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MECHANISM

PANEL ASSEMBLY
90° RETRACTED POSITION

ENGINEERED & PROGRAMMED SYSTEM

- When ready, the **automated** system adjusts the actuators to smoothly extend, driving the panel assembly to a precise 90° horizontal position for deployment

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MECHANISM

PANEL ASSEMBLY
90° EXTENDED POSITION

ENGINEERED & PROGRAMMED SYSTEM

- The panel assembly slides out using a rack and pinion mechanism, and once fully extended, engineering controls activate magnetic locks to prevent back torque on the gear motors, ensuring the panels remain securely positioned

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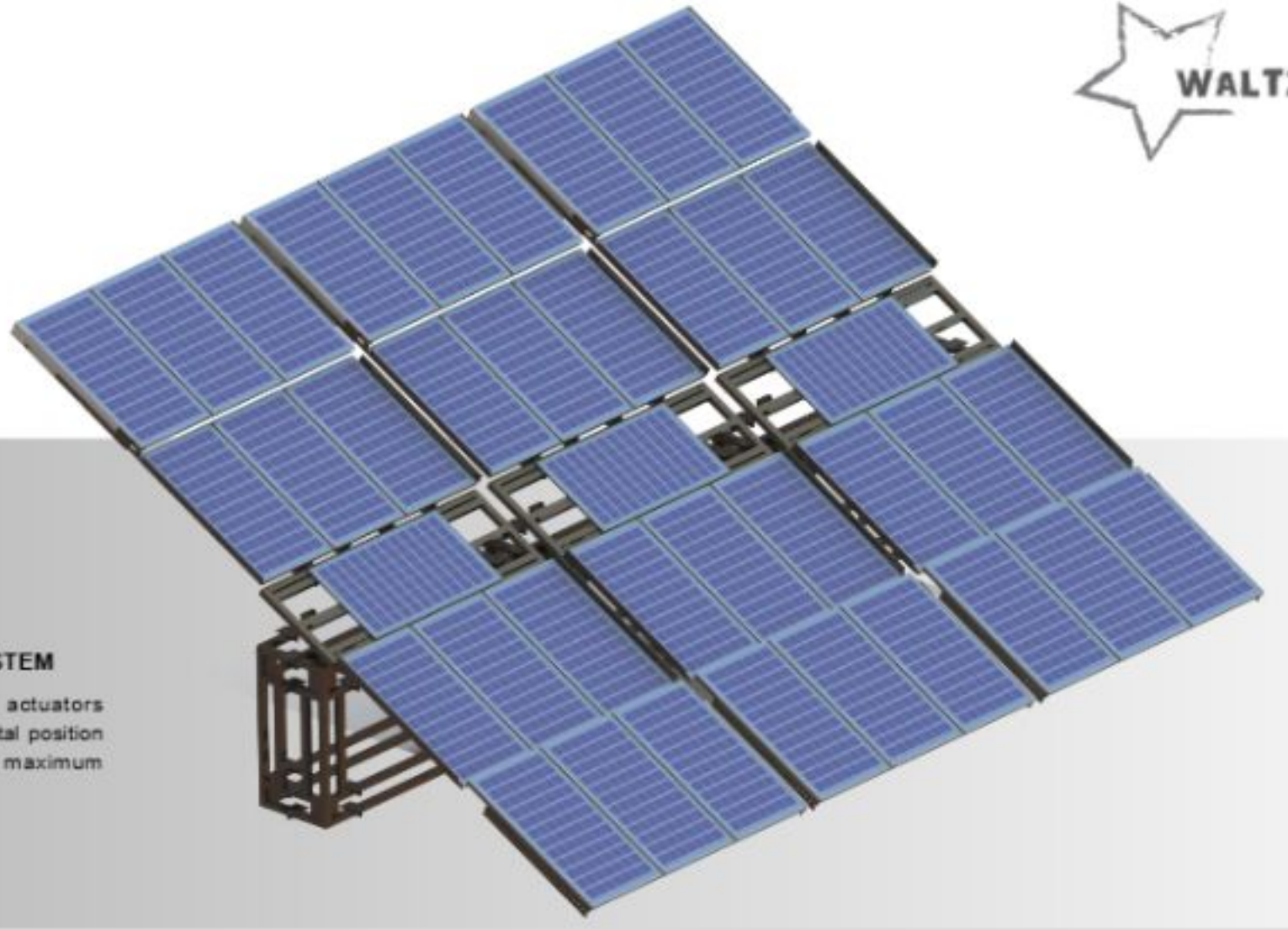
MECHANISM

PANEL ASSEMBLY
30° INCLINATION POSITION



ENGINEERED & PROGRAMMED SYSTEM

- After the panels are extended, the actuators adjust their inclination from the horizontal position to a 30° angle, optimizing them for maximum solar exposure

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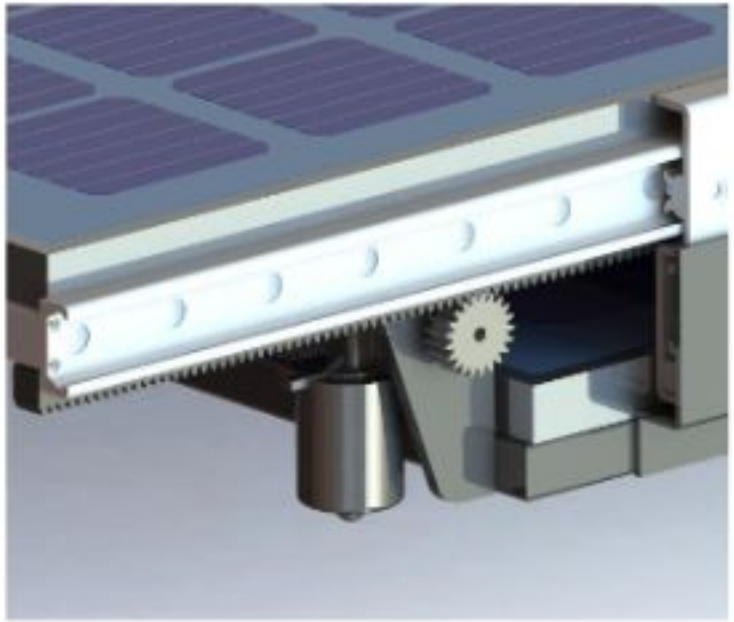
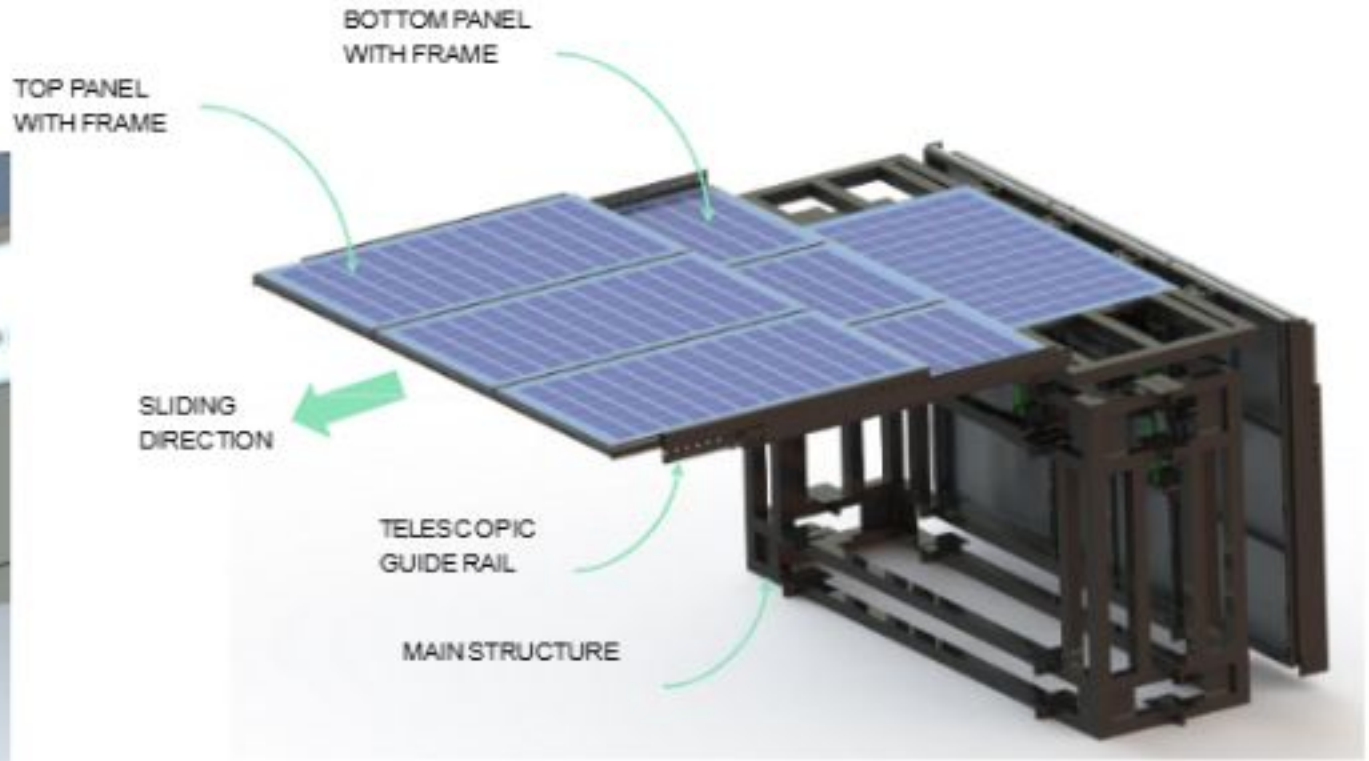
MECHANISM

SLIDING MECHANISM
RACK & PINION





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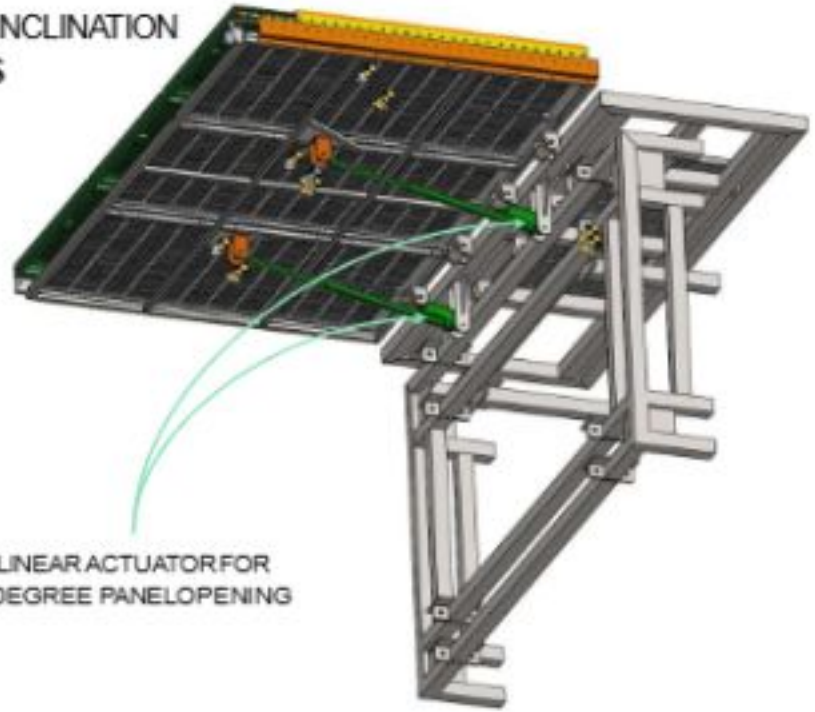
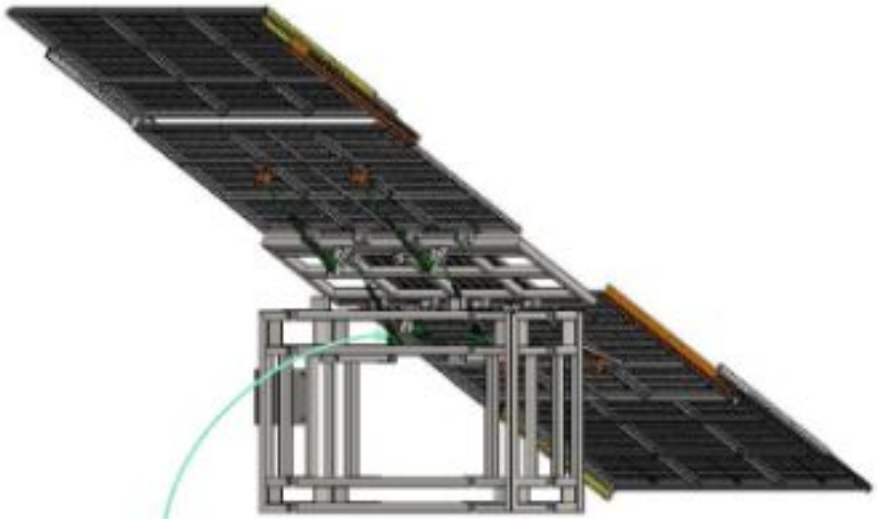
MECHANISM

OPENING & INCLINATION
ACTUATORS



2 X LINEAR ACTUATOR FOR
90 DEGREE PANEL OPENING



LINEAR ACTUATOR FOR 30
DEGREE INCLINATION

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VIEWS

PANEL ASSEMBLY
30° INCLINATION POSITION
ON THE TRAILER

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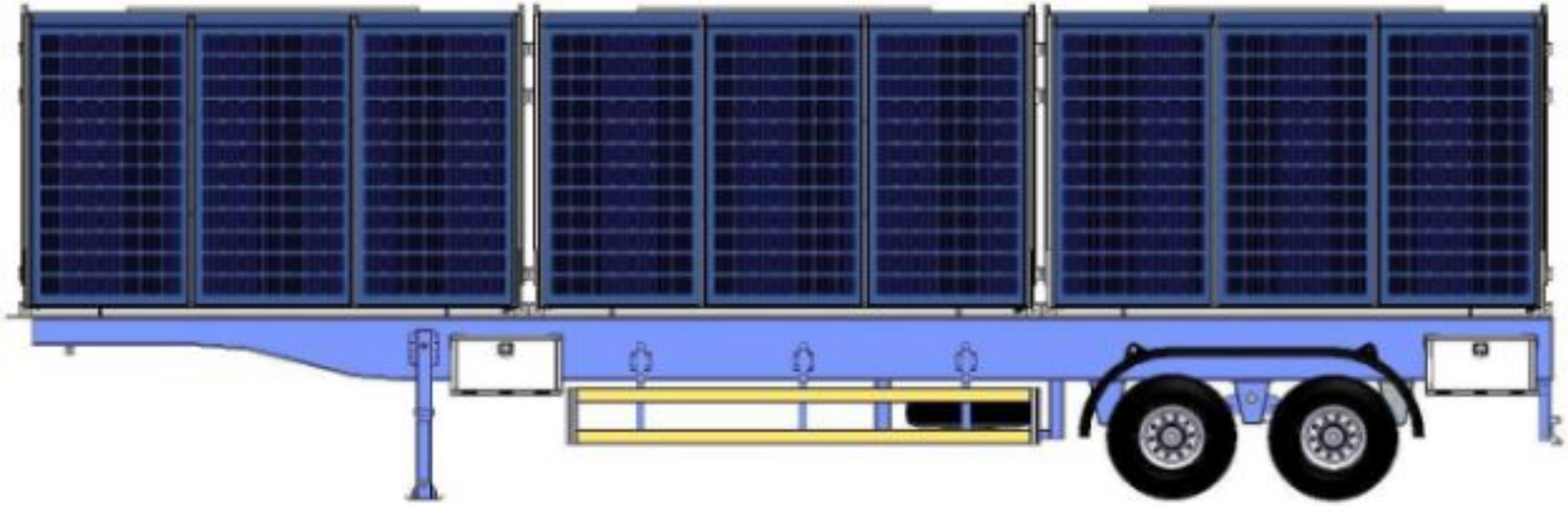
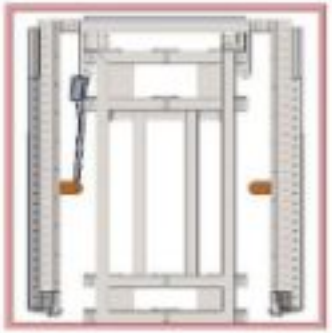
VIEWS

PANEL ASSEMBLY **CLOSED**
POSITION ON THE TRAILER

SIDE VIEW



FRONT

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